

(Continued from Page 4) more than ten feet apart.)

Light Courts of Class "C"

Buildings

SECTION 40. Every outside light court in any building of Class "C" shall be constructed with walls of masonry; the walls to be of the thickness hereinbefore specified for exterior masonry walls in general. Every skylight at the bottom of a light court or upon a roof shall be of corrugated, prismatic, or wire glass of not less than one-fourth inch thickness, set in a metallic frame.

Every skylight not glazed with wire glass shall be protected both above and below by a wire screen supported on an iron frame, at a distance not less than four or more than six inches from the glass. Every such screen shall be made of galvanized wire not smaller than No. 12, with not larger than one and one-quarter inch mesh, and shall have a galvanized wire rim of three-eighths inch diameter at each outer edge and all the wires forming the mesh shall be turned over said rim. Any roofing in a light court shall be treated the same as the main roof. Every skylight used in a floor shall be of such a strength that the frame and glass of same shall be capable of sustaining the same load as the surrounding floor. Every such frame must be metal. Every interior light court shall be protected with sheet metal of not less than No. 22 gauge galvanized iron with locked joints or shall be lathed with metal lath or half-inch metal furring strips, and plastered; or shall be of masonry constructed as described in the foregoing for exterior light courts. There shall be no exposed woodwork, however, in any light court, except the blind stop. Before any interior light court is applied, every interior light court shall be boarded solid and tight with one-inch sheathing. Where an interior light court is covered with galvanized iron, there shall be an inner lining of asbestos paper directly against the boards covering all surfaces thereof, provided, however, that the construction and exposed surfaces of the walls of any interior light court whose area exceeds eight hundred square feet shall be as herein specified for outside court walls.

Roofs

SECTION 41. Rafters in buildings of Class "C" shall be placed not more than twenty inches apart from center to center, and shall be covered with boarding reaching back one inch thick. All roofs shall be covered with metal or with felt and asphaltum covered with gravel or with other fire-resisting composition.

Roof Spaces

SECTION 42. The space between the ceiling of the upper story and the roof in buildings of Class "C" shall be divided by tight partitions of one-inch redwood, into sections each having an area not exceeding two thousand five hundred square feet. All openings in said partitions shall have doors of similar construction and self-closing.

Cornices and Appendages

SECTION 43. Every cornice, gutter, eave or parapet on any building of Class "C" shall be made of incombustible material. Every metal cornice shall have riveted joists, and shall be supported by heavy steel brackets, properly braced and capable of sustaining at each extreme outer point a load not less than three hundred pounds. Such brackets shall not be placed more than two feet six inches apart from center to center and shall be thoroughly anchored into the masonry wall and to the roof, and the top member of each bracket shall be carried through the masonry to the inside thereof, and be properly anchored into the wall. The roof or covering of any cornice may be sheathed with wood, provided that such sheathing shall be entirely covered with metal; or, where composition roof is used, it may extend within six inches of front edge of cornice and said space of six inches shall be covered with metal and the fire wall shall extend solidly to the under side of the boarding which forms the top side of the cornice. No cornice on any building shall exceed in width one inch for every foot in height of the building.

Appendages of Buildings of Class "C"

SECTION 44. The load of the bearing of joists on their supports shall not exceed five hundred pounds to the square inch when the joists are loaded to their maximum load.

Bond Iron

SECTION 45. The load of the bearing of joists on their supports shall not exceed five hundred pounds to the square inch when the joists are loaded to their maximum load.

Bond Iron

SECTION 46. If pressed facing is used, it must be bonded into its backing at every fifth course, or oftener. Bonds shall be established by solid headers or standard metal ties. In the case of pier faced with pressed brick, only solid headers shall be used, but bond stones or iron plates may be substituted

for such headers. Pressed brick in all cases must be laid so as to have full bed of mortar under each brick. The mortar used in backing all pressed brick shall have a composition of not less than one-sixth of the bulk of the mortar.

Arches and Lintels

SECTION 47. Every opening exceeding five feet in width in a wall of brick or stone shall have a good and sufficient arch of stone, brick or terra cotta, well keyed and with good and sufficient buttments, or shall have a lintel of stone, iron or steel of sufficient length with sufficient bearing at each end of not less than five inches on the wall. If a wood lintel is used over the inside of any opening, there shall be a relieving arch over the same, and the top edge of such lintel shall be shaped to a curve to fit the under side of the relieving arch, so as to reduce the thickness of such timber at the ends; but in no case shall a wood lintel be used where an opening exceeds five feet in width. All masonry arches shall be of sufficient section to safely carry the superimposed load. The rods shall be of wire necessary to secure stability. There shall be no cast iron lintels used in an opening exceeding seven feet in width. No wood beam or girder shall be used to support any masonry wall.

Bond Plates

SECTION 48. Every masonry pier exceeding five feet in height and having a load exceeding ten tons to each square foot shall be provided with bond plates of iron or steel, extending through the entire section of such pier, at intervals in height of such pier not exceeding one and one-half times the diameter of such pier.

Furred Walls

SECTION 49. If such masonry walls are furred, all furring shall be provided with fire stops at each floor line and at least one point intermediate between the floors. By furring is meant any frame studding or strips on the inside of any masonry.

Care of Walls in Construction

SECTION 50. During the construction of any building, no wall shall be carried on a greater height than six feet above any other wall of the same structure.

Anchor, Straps, Ties and Stirrups

SECTION 51. In buildings of Class "C" girders shall be anchored to the walls and fastened to each other so as to make a continuous tie from wall to wall. The beams may be anchored by suitable iron straps of not less than one and one-fourth inches area of section, turned in, spiked or bolted so as to develop the strength of the tie, or may be lapped and spiked together so as to form a continuous tie and the ends of anchors may be in the form of loops or turned up into beams and down at least four inches into brick work at a point not more than four inches from outer face of wall, or may be three-fourths inch anchors as hereafter required for joists. Joist anchors shall be of three-fourths inch round iron at least one inch thick, with three-quarter by ten inch "head" or six by six iron washer not less than three-eighths inch thick.

Such head or washer to be not more than four inches from outside face of wall. All anchors shall go through wall where possible. The inner end of anchors shall be secured by suitable iron straps or joists at the side. Inner ends of joists to be spiked for continuous tie. When joists run approximately parallel with adjoining brick walls, said walls shall be anchored to each tier or joists above first floor with anchors reaching back from headers to hooks over the fourth joist. Heads and rods to be as described for other joist anchors, but joist to be struted in such a way as to combine the four joists into a truss with the heads of struts close to anchors and the foot of struts close to cross walls or partition. Anchors shall be not less than six inches apart in all walls and every tier of joist above walls and every tier of joist above first tier.

Steel, wrought or malleable iron stirrups of proper size shall be used to support all header joists from trimmers and all tall joists from headers. In every building of Class "C" the upper two stories of frame buildings three or four stories high. The interior non-bearing partitions of the first story in frame buildings three stories high, and those of the first and second stories in frame buildings four stories high must be not less than 2x4 inch studding.

Every exterior wall and interior partition of each story shall be braced diagonally in each direction with two inch braces of the full width of the studs, and such braces shall be placed at intervals not exceeding twenty-five feet in any wall or partition over twenty feet long.

Every building exceeding two stories in height shall be sheathed solidly with sheathing not less than one inch thick, put on diagonally and nailed with two nails at every place of contact with studding.

In every building exceeding three stories in height, each tier of studding shall be framed separately, having double plates at the top of each tier. The bottom of such studding shall extend down to the plate of the tier of studding below. An intermediate story may be carried on one inch by four inch ribbon or gir, gained into the studding. In every building of Class "D" the studding shall be doubled around every opening in any partition, and the wall above every opening shall be trussed wherever required to preserve the

uniform strength of such wall. Every opening in a floor for a stairway or any other purpose, shall have the thickness of the trimmer and header joists increased so as to preserve the uniform strength of the wall. All openings shall be braced in every direction, and the roof rafters of every building over one story in height shall not be less than two by four inches. And in every building over three stories in height the same shall be not less than two by six inches. In every one story building the roof rafters shall not be less than two by three inches.

Foundations

SECTION 61. Collar and foundation walls in buildings of Class "D" which are not over one story in height, shall not be less than eight inches thick and not more than seven feet high. Buildings of Class "D" over one story in height shall have masonry foundations not less than eight inches thick nor less than eight inches high, and if such wall is over three feet high the same shall be not less than twelve inches thick. Buildings over two stories in height shall have foundation walls not less than twelve inches thick, if such wall is not more than ten feet high, and each successive ten feet or fraction thereof below the top ten feet shall be four inches thicker than the section next above, but no such wall shall be less than fifteen inches high. Each such wall shall have a footing not less than 75 per cent wider than the section of wall resting upon it. Depths of foundations shall not be less than as specified in the following schedule:

For two-story buildings, not less than one foot below natural surface of ground.

For three and four story buildings, not less than two feet below natural surface of ground.

Exterior Piers of Class "D" Buildings

SECTION 62. No piers shall be used for an exterior wall in a building more than one story in height.

Interior Masonry of Class "D" Buildings

SECTION 63. Where piers are used under an interior partition of a building they shall not be less than eight inches square for one story buildings, and shall be four inches larger in each direction for each additional story in height. The footings for every wall or pier shall have an area which shall conform to the rule given for the bearing value of ground set forth in Section 126 of this Ordinance. All piers must have a redwood pad of two-inch stock or a cast iron pad, to cover its entire surface, bedded in mortar, level every way.

Roof Spaces

SECTION 64. Roof spaces in buildings of Class "D" shall be subdivided as herebefore provided for buildings of Class "C."

Floors and Stairways

SECTION 65. Class "D" buildings, four stories in height, shall have double floors.

Buildings of Class "D", other than dwellings, shall have stairways conforming to the requirements for buildings of Class "C."

Skylights

SECTION 66. All skylights on roofs in buildings of Class "D" constructed at an angle less than 22 1/2 degrees, not enclosed by a substantial railing at least three feet high, shall be protected by screens of No. 10 mesh not more than one and one-half inches square, secured to the sash at least four inches above the glass. If wired glass not less than one-fourth of an inch thick is used the wire screens may be omitted.

Factory Buildings

SECTION 67. All factory buildings of Class "D" shall be two stories in height shall be of post and girder construction and the roof covering shall be as herebefore provided for buildings of Class "C," or may be constructed of corrugated iron.

Hotels

SECTION 68. In buildings of Class "D" more than two stories in height, used or designed to be used as hotels, as defined in this Ordinance, all corridors, hallways and the under side of all stairways shall be metal lath and plastered.

Stairways

SECTION 69. In every building of Class "D" exceeding three stories in height, the upper two stories shall be of post and girder construction and the roof covering shall be as herebefore provided for buildings of Class "C," or may be constructed of corrugated iron.

Beams on Wood Columns

SECTION 70. All wood joists shall have one row of 2x3 inch cross bridging for each ten feet of span or fraction thereof. All spaces between joists shall be blocked at each bearing partition or girder with blocks of not less than two inches thick and of the full height of joist.

Each and every stud partition shall have two inch bridging the full width of studs at floor and ceiling and once between floor and ceiling.

Wood Beams, Girders and Columns

SECTION 71. Every wooden column shall have an even bearing through its cross section, and shall be of straight-grained timber. There shall be no wood work extending below the surface of the ground of basement floor. Every column over six inches by six inches of cross section shall rest on a metal base plate, which shall be raised above the basement floor. Where any wooden column passes through a floor there shall be a metal cap provided to support the beam at such floor, and the column from the floor above shall pass through the girder and rest directly on the metal cap of the column below. Girders resting at each side of the column shall be secured together with proper metal anchors and straps.

Stairways to Basements

SECTION 72. Every basement used for the exhibition and sale of goods at retail, shall be provided with a stairway at least five feet in width for every five thousand square feet of area or fraction thereof in such basement. Such stairways shall be without winders and shall have a handrail on each side and shall be as far removed from each other as possible and with proper aisles of not less than the full width of stairways, without obstruction, connecting therewith.

Basement Pipe Inlets

SECTION 73. The cellar or basement of any store, warehouse or factory shall have through its ceiling a pipe inlet with cover flush with the floor above. Said pipe inlet shall not be less than eight inches in diameter and shall be kept free from any obstruction.

Where the cellar or basement is more than fifty feet wide there shall be two such inlets in width of the room, and these shall be repeated for every eight feet in depth or fraction thereof.

Underpinning Walls

SECTION 74. All walls used for underpinning any building shall be of masonry four inches thicker than the wall they support. Mortar used in underpinning shall contain not less than one part cement to four parts of sand and where used in a wall it must be hard burned and well formed.

Standard Depth

SECTION 75. All chimneys and flues hereafter constructed shall be of brick or stone; their enclosing walls shall not be less than four inches thick and except in dwellings, flats, apartment houses and tenement houses, shall, if less than eight inches thick, be lined on the inside with well-burnt clay or terra cotta pipe not less than one inch thick. Said lining shall start from the bottom of a flue or the throat of a fire place, be continuous to the top of the flue, and be built in first and bricked around as carried up. Flues where lining is not required by this Ordinance shall be smoothly plastered on the inside, and if less than eight inches thick, shall be smoothly plastered for the entire height on the outside except above roof. No smoke flue shall be less than 7 1/2 by 7 1/2 inches in the clear and such sized flues shall have but one inlet; for two inlets the flue shall be not less than 12 by 12 inches in the clear; for three inlets not less than 12 by 15 1/2 inches in the clear, and for a larger number of inlets the size shall be increased in the same proportion. Flues larger than two hundred square inches and less than five hundred square inches cross-section area shall be surrounded by walls not less than eight inches thick; flues larger than five hundred and less than one thousand square inches cross-section area shall be surrounded by walls not less than twelve inches thick to a height of fifteen feet above the inlet, and eight inches thick the remaining height; walls of flues larger than one thousand square inches shall be proportionately increased in size and shall be lined with fire brick for at least twenty feet above the inlet.

The inside four inches of all boiler flues for boilers of over twenty-five horse power, shall be of fire brick laid in fire mortar to a distance of twenty feet in any direction from the source of heat. All chimneys and flues shall extend at least four feet above any flat roof, and if the chimney or flue projects through a pitched roof at or near the ridge or peak of the roof such chimney or flue shall project at least one foot above said ridge or peak of roof. If the chimney or flue pierces the roof at the eave or on the slope of roof, it shall extend above the highest point where it pierces the roof at least five feet, measuring at center of chimney on the line of the highest slope of roof.

Fireplaces

SECTION 76. All fireplaces and chimneys hereafter constructed shall be placed, whether intended for ordinary fireplaces used or not, shall have trimmer arches to support the hearths; arches shall be of brick, stone, burnt clay or concrete, at least twenty inches wide measured from the face of the chimney breast and they shall not be less than the width of the chimney breast. Wood centers shall be removed from under trimmer arches and no timber shall be placed under any fireplace or hearth. Hearths shall be of brick, tile, stone, or cement.

Fireplaces shall have arched heads with iron arch bars over the top of the opening not less than one-quarter by two and one-half inches, turned at the ends two inches in each side of chimney breast, so as to make a perfect bond for arch. All fireplace openings where furred with wood on face shall be surrounded by a brick rim eight inches wide, projecting four inches, bonded into brick work. The fire bricks and jams of all fireplaces shall not be less than eight inches thick, of solid masonry. When a grate is set in a fireplace a lining of fire brick at least two inches thick shall be added to the fire back, unless soapstone or a cast iron is used, and filled solidly behind with fireproof material.

No mantel or other wood work shall be exposed back of a summer piece; the iron work of the summer piece shall be placed against the brick or stone work of the fireplace. No fireplaces shall be closed with a wooden fire board.

Pipes for gas logs or gas grates shall only enter at sides or through the brick work.

Gas Grates and Gas Logs

SECTION 77. Every opening for a gas grate or a gas log shall be surrounded by brick work on all sides and over top at least eight inches thick, and provided with, and carefully connected to a flue not less than three by twelve inches, which flue shall be formed of galvanized iron, joints lapped, riveted and soldered, and the whole enclosed in similar pipe of a size

to leave at least one-quarter inch air space all around between the two pipes, and the outer pipe shall be covered with three thicknesses of asbestos paper, said paper to be not less than ten pounds to one hundred square feet, or said vent may be built of cement or terra cotta pipe of equal size. This pipe to be carried up and out through and at least eighteen inches above the roof, with a "T" connection at the top.

Instantaneous Heaters

SECTION 78. Every instantaneous heater shall be provided with a vent not less than three inches in diameter, extending clear through the roof, with a "T" connection at the top; and around every such vent at all places not exposed there shall be a galvanized iron sleeve extending the full length of the concealed portion with a clear air space of not less than one inch surrounding the vent, provided, however, that such vent-pipe may open into air shafts or flues, provided the walls of such air shafts or flues are built entirely of stone, brick, or concrete.

Venting of Gas Appliances

SECTION 79. (A) There shall be provided some means of heating in bathroom, breakfast room, and living room, but in no case shall other effective means of heating be incorporated in the structure, gas vents, extending through the roof, shall be installed. If a room exceeds two hundred square feet in floor area, such vents shall be supplied of a cross section area fifty per cent greater than the sizes given in the following table.

(B) All stationary heaters using gas as fuel shall be vented in one of the following methods: a regulation masonry chimney, a terra cotta or concrete pipe shall be placed in the partitions of the sizes hereafter specified.

The minimum area of gas heater vents shall be as listed below:

1-Story Buildings	2-Story Buildings
One heater..... 9 sq. in.	18 sq. in.
Two heaters..... 18 sq. in.	20 sq. in.
Three heaters..... 20 sq. in.	24 sq. in.
Four heaters..... 24 sq. in.	30 sq. in.

(C) Water heaters and floor furnaces shall be vented as follows

1-Story Buildings	2-Story Buildings
One heater..... 4" diameter	6" diameter
Two heaters..... 6" diameter	8" diameter
Three heaters..... 8" diameter	10" diameter
Four heaters..... 10" diameter	12" diameter

Every water heater and floor furnace shall have a separate vent except that they may be vented into a regulation chimney. Every water heater to heat water for more than five families shall be vented into a 6" chimney.

(D) Where more than one heater is used on one vent, the additional heater shall be connected by means of a "Y" connection with its partition extending eighteen inches above the inlet.

Every inlet thimble shall be double and so constructed as to contain a one-fourth inch air space between the inner and outer shells and with an effective lug or rim on the inner end to prevent the fixture vent pipe from extending too far into the vent chamber.

Every vent shall run in a vertical direction and not vary more than thirty inches from the true vertical. Every vent shall be carried through the roof and at least eighteen inches above the same.

Every cement and terra cotta vent shall have a three-inch sheet metal sleeve placed around each joint. Such sleeve shall be securely attached to the supporting framework.

(E) No water heater shall be installed in any bedroom, bathroom or closet or under or adjacent to a stairway or other means of egress, or in a closet having openings at the top and bottom of an area of fifty square inches, and only in rooms or porches having at least one window with six square feet of area. Each such opening shall lead to the outer air and shall be lined with incombustible material.

(F) The walls within eighteen inches of the burners of any floor furnace, water heater or cooking range shall be lathed with non-combustible lath and covered with exposed woodwork within eighteen inches shall be covered with two layers of asbestos paper and one layer of galvanized iron, or a sheet of twenty-four gauge galvanized iron with one inch air space between it and the exposed wood.

Notice as to Heating Apparatus

SECTION 85. Where hot water, steam, hot air or other heating appliances are hereafter placed in any building, due notice shall first be given to the Building Inspector by the person or persons placing the same.

Fire Doors and Shutters

SECTION 86. (A) Exterior openings: Every exterior window and opening in buildings within Fire District Number One or Fire District Number One-A of the City of Torrance that overlooks any adjoining building or is within thirty feet of the wall of any opposite or diagonal exposed building other than a blank wall, shall have metal covered shutters or doors, constructed and arranged as specified in this section, or in lieu thereof, may have frames and sash of metal glazed with wire glass not less than one-quarter of an inch diameter, in a pane in which shall be larger than twenty-four by thirty inches.

Rolling iron or steel shutters may be used on the first story only, and shall be counterbalanced so as to be readily opened from the outside by firemen.

All shutters or doors opening vertically above the first story, shall be so arranged as to be readily opened from the outside by firemen.

(B) Every boiler room shall be provided with one and one-half inch diameter, with at least twenty-five feet of hose of not less than one and one-half inches in diameter at firemen.

(C) Construction: All fire doors or shutters shall be constructed in conformity with the following specifications: doors and shutters shall be constructed of redwood of two thicknesses of matched boards not over six inches wide at right angles to each other, or crossing diagonally, nailed with wire nails clinched and securely covered with good quality tin on both sides and edges; sheets to be 10x14 inches in size, put together with tin roofers locked joint and securely nailed; the nails to be driven inside the lap and the joints hammered down over the nail heads. No solder shall be used. The hinges, bolts, and latches shall be secured to the door or shutter after the tin has been nailed on. Sheet iron shall not be used. Doors shall never be less than two inches, nor shutters less than one and one-half inches thick.

Hinges and hangers shall be of strong wrought iron and fastened to the door or shutter with bolts and nuts. Latches shall be so arranged on doors and shutters that they can be opened from either side.

Swinging doors and shutters shall extend at least three inches over the masonry at sides and top of door or openings, and one and one-half inches below top of opening, or they may close into the opening, provided the wall be rabbeted three inches at the top and sides and one and one-half inches at the bottom to receive the same.

All sliding doors shall extend at least three inches over the masonry at sides and top of doorway opening, and one and one-half inches below top of sill. Sliding doors may run at the bottom in a channel iron so set as to give the door a bearing of one and one-half inches below top of sill.

Sills shall break the floor and rise at least one inch above floor level to prevent passage of flame and smoke, and be constructed of masonry. Wood sills shall not be used where fire door or shutter is required.

Rail or track must be heavy enough to withstand heat without warping, and may be made of angle or channel iron, and both rails must be secured to wall whenever possible by bolts passing through the wall; otherwise "expansion" bolts shall be used. Where channel or angle iron cannot be obtained the track may be made of common flat bar steel three-eighths inch to one inch thick and four inches wide, bolted through the wall with three-fourths inch bolts. The distance of track from the wall shall be regulated by the width of the bolts.

Binders shall be placed so as to prevent the door from rolling off the track at either end, and also hold it in position when closed.

Floor Area of Buildings

SECTION 87. In buildings of Class "C," if the distance between masonry exterior, party or division walls exceeds twenty-five feet, there shall be masonry supporting walls, or girders supported as required by this Ordinance; and no single floor area between exterior, party or division walls of the thickness specified in this Ordinance shall exceed 7500 square feet.

Provided, however, that in case the foregoing described buildings are completely equipped with a system of automatic sprinklers in a manner approved by the Board of Fire Underwriters of the Pacific, the area between such exterior, party or division walls may be increased 25 per cent.

No wall or part of wall in any existing building, or in any building hereafter erected, shall be removed to produce a larger area, than those named above.

Timber Details

SECTION 88. The header beam carrying the tail beams of a floor, and supporting the trimmer arch in front of a fireplace shall not be less than twenty inches from the chimney breast. Every girder or truss shall have a bearing of not less than eight inches, and joists not less than four inches, on masonry walls. All headers and trimmers shall be of such size that the strength of the floor shall be uniform. Where joists or beams rest on masonry walls the ends of such joists and beams must be beveled at least three inches at the ends resting on such walls.

Boiler Rooms

SECTION 89. All walls surrounding a boiler room shall be of masonry or terra cotta to its full height, and the ceiling of the entire boiler room shall be plastered on metal lath. Every boiler room shall be provided with a sump hole or blow-off chamber, for the purpose of blowing off the steam from the boiler, independent of the sewer.

Any opening into a boiler room from the interior of the building shall have a door or shutter constructed as specified in Section 86 of this Ordinance, arranged to close automatically, and where oil is burned every doorway shall have a masonry or terra cotta sill rising of not less than two inches above the floor. No wood shall be used in the construction of the floor of any boiler room.

In buildings of Class "C" and "D" there shall be a clear space above the boiler of not less than five feet, and above the breaching of not less than two feet, provided that a sheet of No. 18 iron shall be suspended not less than two inches from the ceiling, over and over one foot beyond breaching.

Every boiler room shall be provided with a stand pipe not less than one and one-half inches in diameter, with at least twenty-five feet of hose of not less than one and one-half inches in diameter at firemen.

(Continued on Page 6)

than masonry or tile, shall be metal lathed and plastered or have equivalent protection. Such stacks on the outside of a building shall not be nearer than eighteen inches to any wood work or nearer than twelve inches to any wood lath and plaster, and protected with metal extending two feet on each side of such stack.

Chimneys to Be Extended and Cleaned

If the Building Inspector deems any chimney unsafe to any adjoining or adjacent building, said chimney shall be carried up four feet above the extreme height of said building and if an extension of iron pipe is deemed unsafe by said Building Inspector, such extension shall be of brick or terra cotta pipe. The owner or occupant of any building shall cause the chimneys thereof to be swept as often as may be required to keep same clean.

Heating Furnaces

SECTION 82. The top of every furnace or boiler shall be covered with sheet iron and brick supported by iron bars, with at least two inches of sand on top of brick, so constructed as to be perfectly tight. The top of every portable heating furnace or smokepipe shall be not less than two feet from the under side of nearest joist or girder, excepting where such joists or girders are protected by metal furring strips and metal plates or plaster and metal lath; but in no case shall the top of the furnace or smokepipe be nearer than fifteen inches to the under side of the nearest joists or girders. Such metal plates or plaster, covering such furnace or smokepipe shall extend not less than one foot each side of such smokepipe and two feet on all sides of such furnace. Every furnace used for heating purposes shall be set on a masonry floor, and there shall not be any wood work, wood lath and plaster within two feet of such furnace, unless said wood work or wood lath and plaster is protected by metal furring one and one-half inches deep and metal plates or plaster on metal lath, and in no case shall it be nearer than fifteen inches to either smokestack or furnace.

Where petroleum or any product of petroleum is used for fuel for a furnace, the said furnace shall be sunk in a concrete or masonry pit, with a concrete floor sunk not less than six inches below the surrounding floor level; such pit to be at least two feet on all sides larger than the furnace. In no case shall the smokepipe from a furnace enter the same flue to which the exhaust from an automatic gas water heater is connected.

Furnace Pipes, Boxes and Fittings

SECTION 83. All concealed wall pipes, register boxes and fittings shall be thoroughly covered with two thicknesses of eight-pound asbestos paper cemented to same and after being placed, all points shall be covered in the same manner.

All concealed wall pipes and all first floor side-wall boxes shall be provided with suitable boots extending to the under side of floor joists, tightly fitted together and well covered and cemented as above.

The boots at the bottom of all risers and side-wall register boxes shall be attached at the time said risers and boxes are placed in the building.

All wall pipes to have full capacity at all points, with no square corners. Adequate space shall be taken of all available space including lath, plaster and baseboard, for inlets or throats of side-wall register boxes on first floor.

Steam Pipes

SECTION 84. Steam pipes shall not be placed within two inches of any timber or wood work, unless protected by metal; then the distance shall not be less than one inch.

All steam pipes passing through floors, ceilings, or lath and plaster or wood partitions, shall be protected by a metal tube passing through the said floors, ceilings or wood partitions, and capped at the floor, having a metal cap at the floor.